



Tackling the Gorilla: The Nation's Largest Upgrade Program

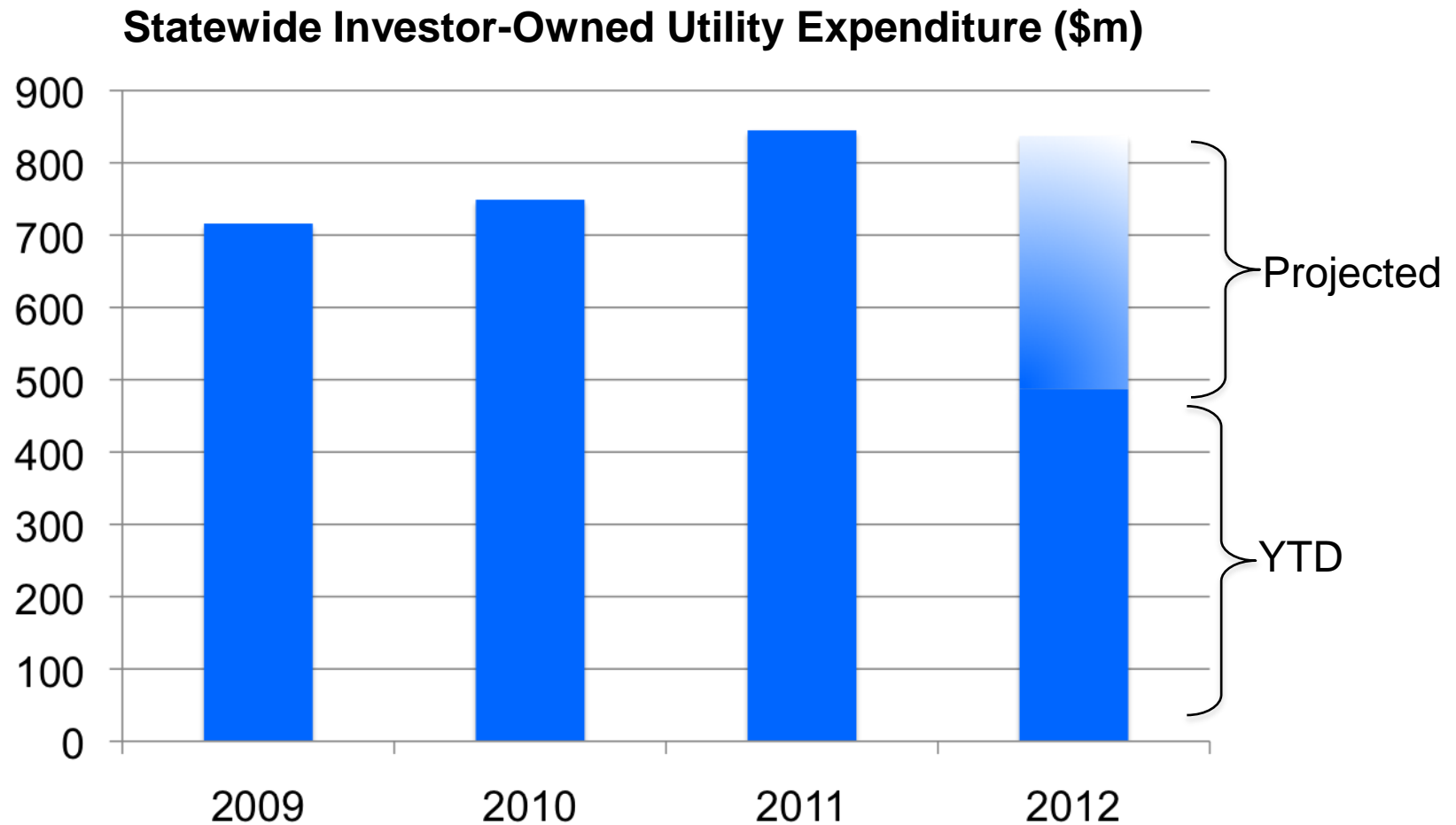


Mark Ferron

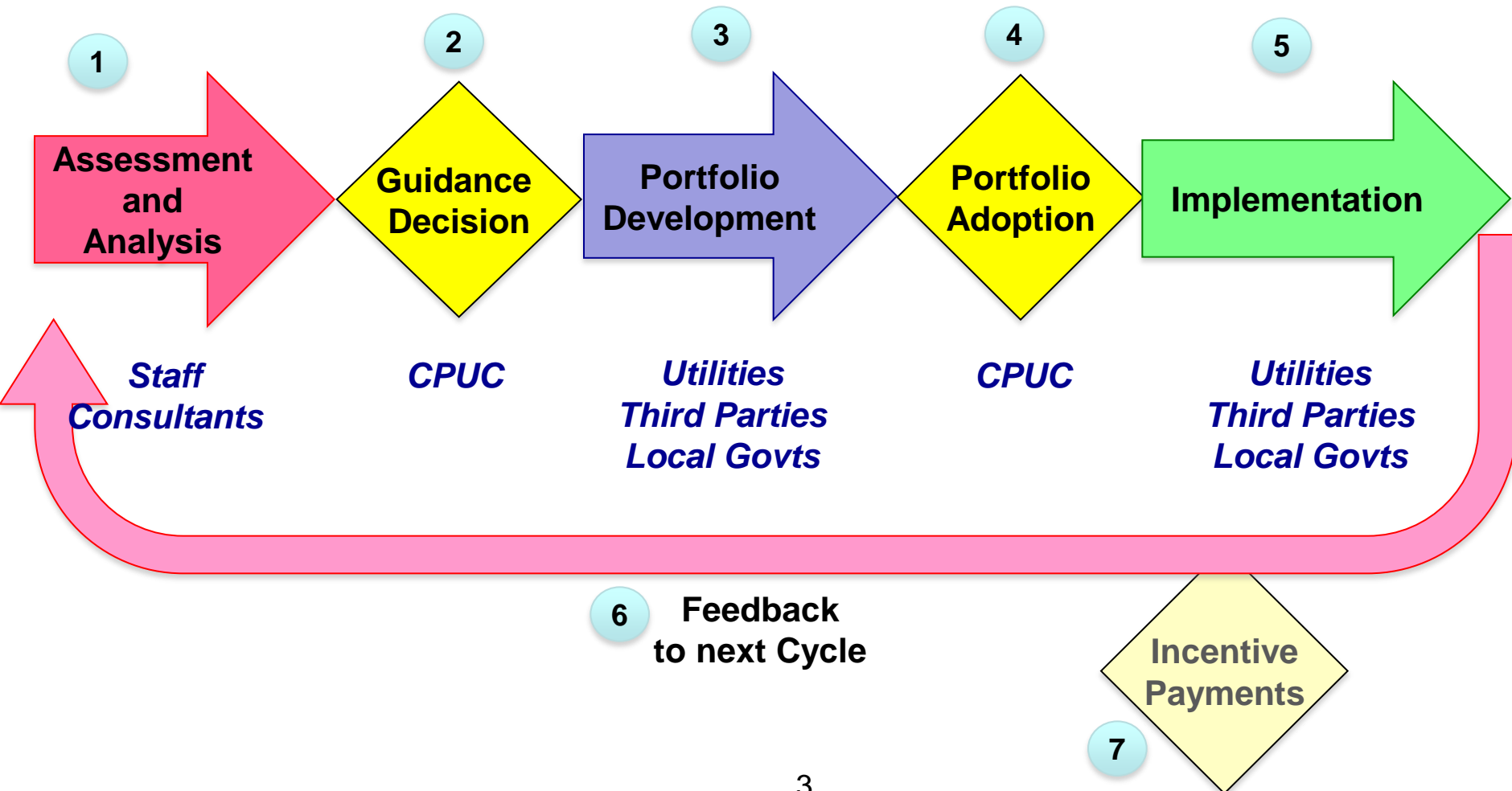
California Public Utilities Commission

November 15, 2012

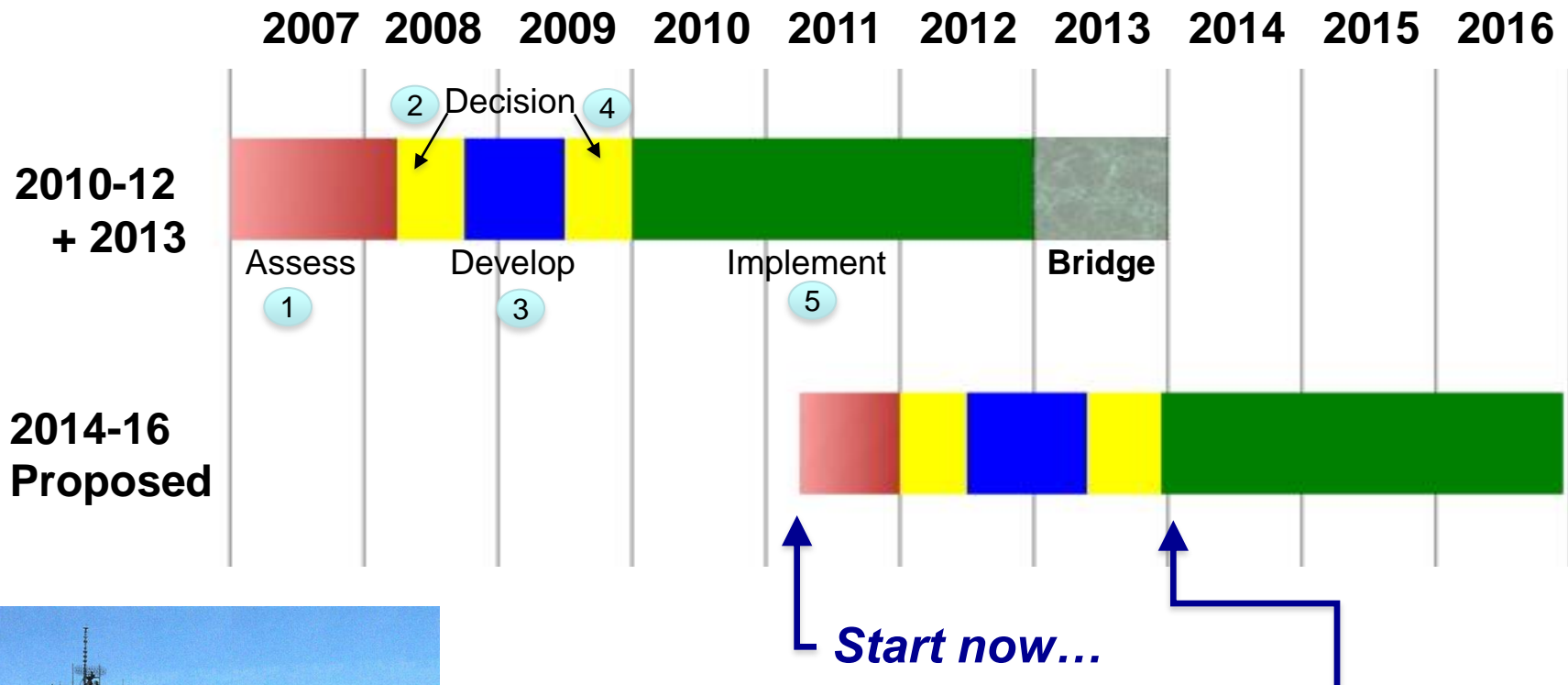
California's Expenditure on Energy Efficiency



Approval and Implementation Process for CPUC Energy Efficiency Programs



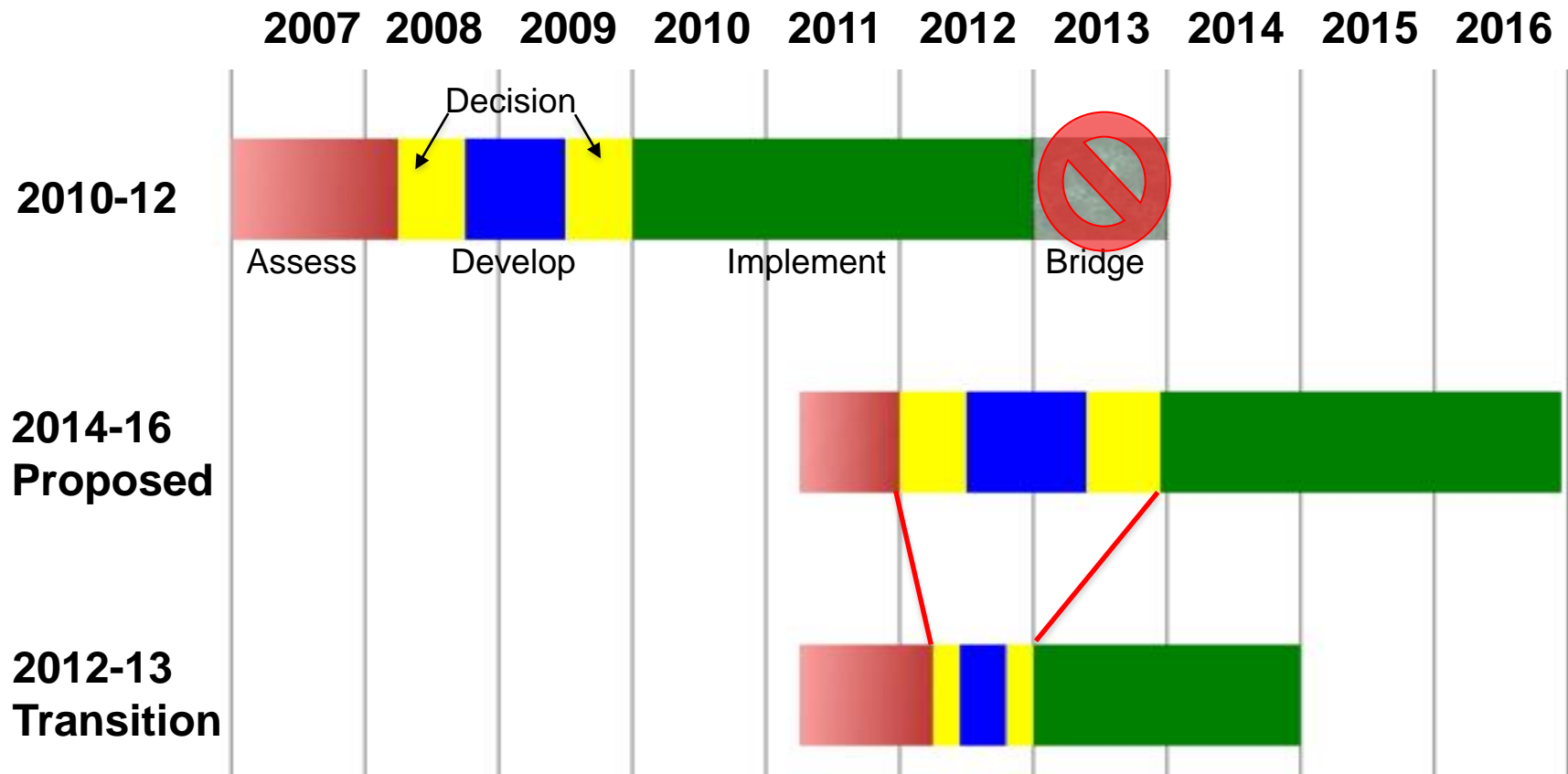
How much can we do and how fast?



*... but change won't happen
until 3 years from now*



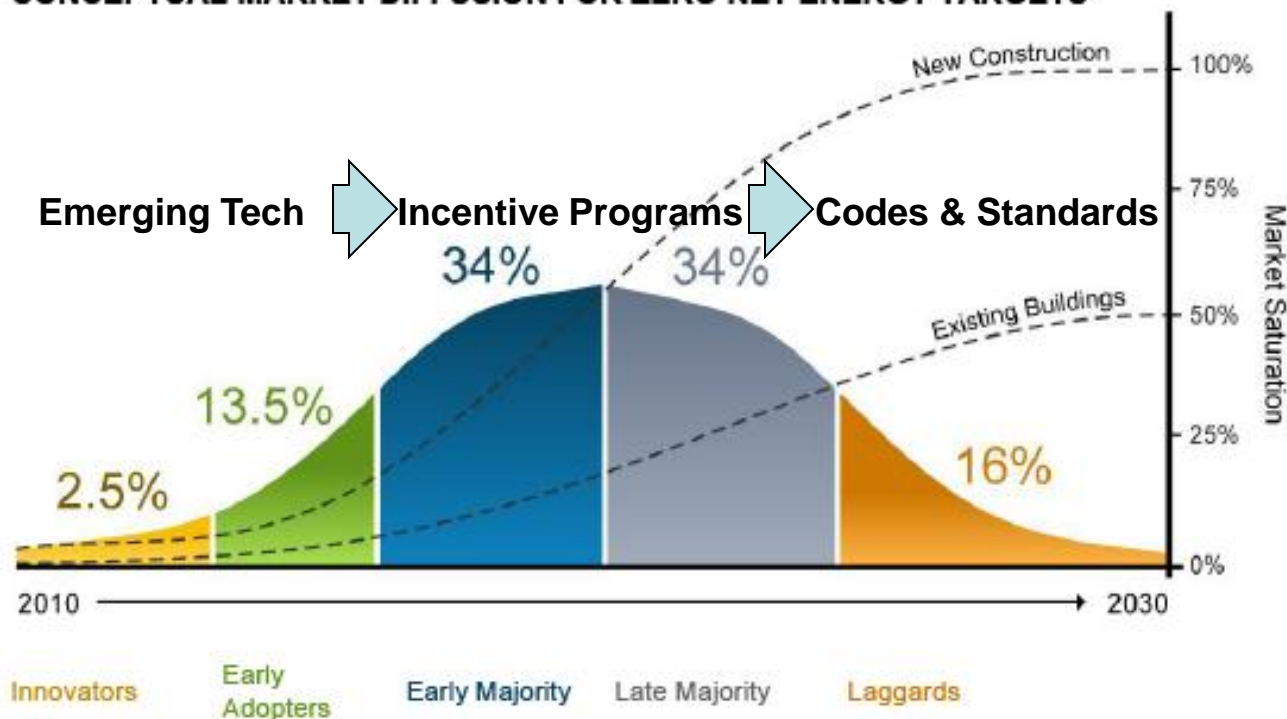
How much can we do and how fast?



*Not a “Bridge”
but a “Transition”*

Market Transformation is the Goal

CONCEPTUAL MARKET DIFFUSION FOR ZERO NET ENERGY TARGETS

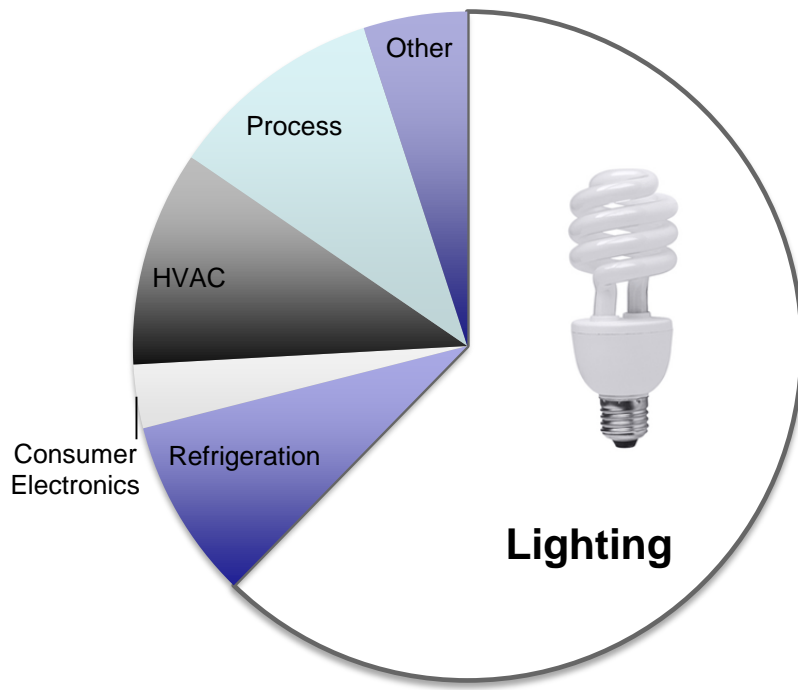


CPUC Definition (D.09-09-047):

Market transformation is long-lasting, sustainable changes in the structure or functioning of a market achieved by reducing barriers to the adoption of energy efficiency measures to the point *where continuation of the same publicly-funded intervention is no longer appropriate in that specific market.*

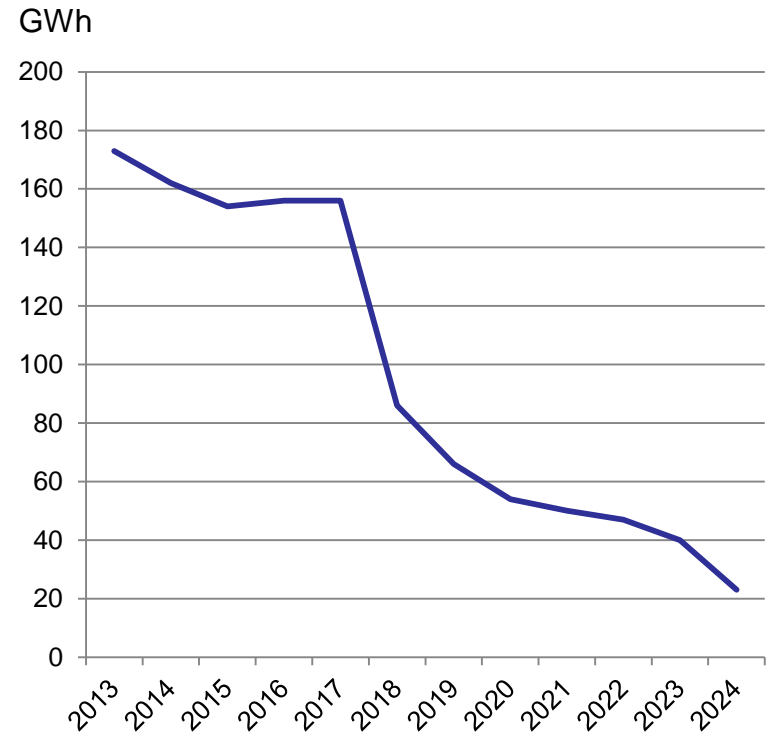
Challenges to California's EE Programs...

2010-2012 Electricity Savings by CA Investor Owned Utilities



Source: CPUC, Energy Efficiency Groupware Application (October 2012)

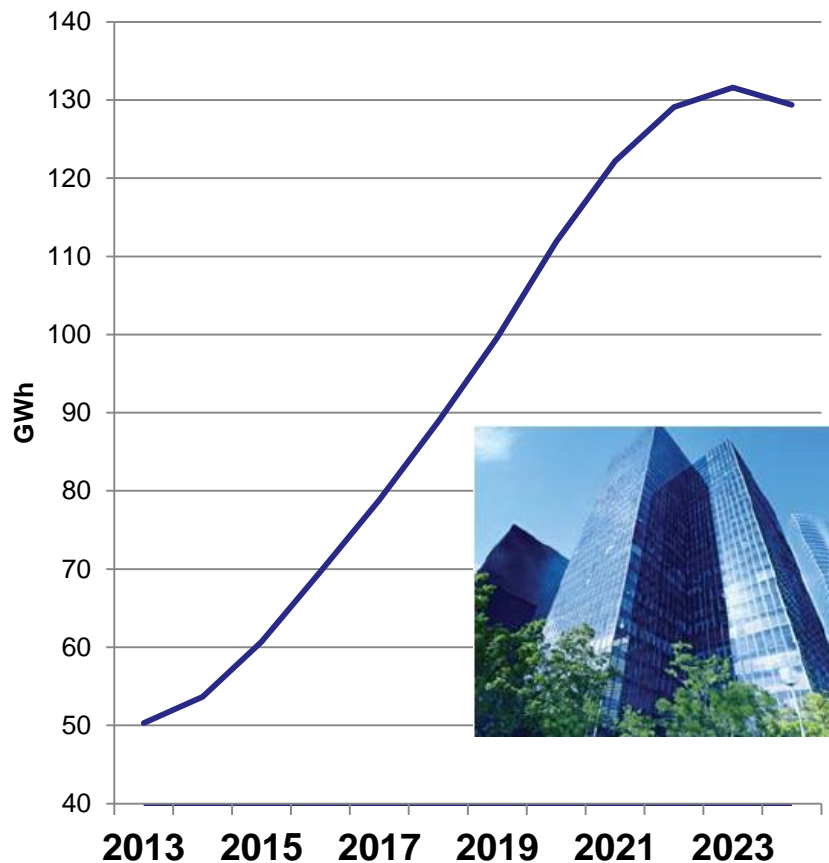
Statewide Market Potential for Residential CFLs



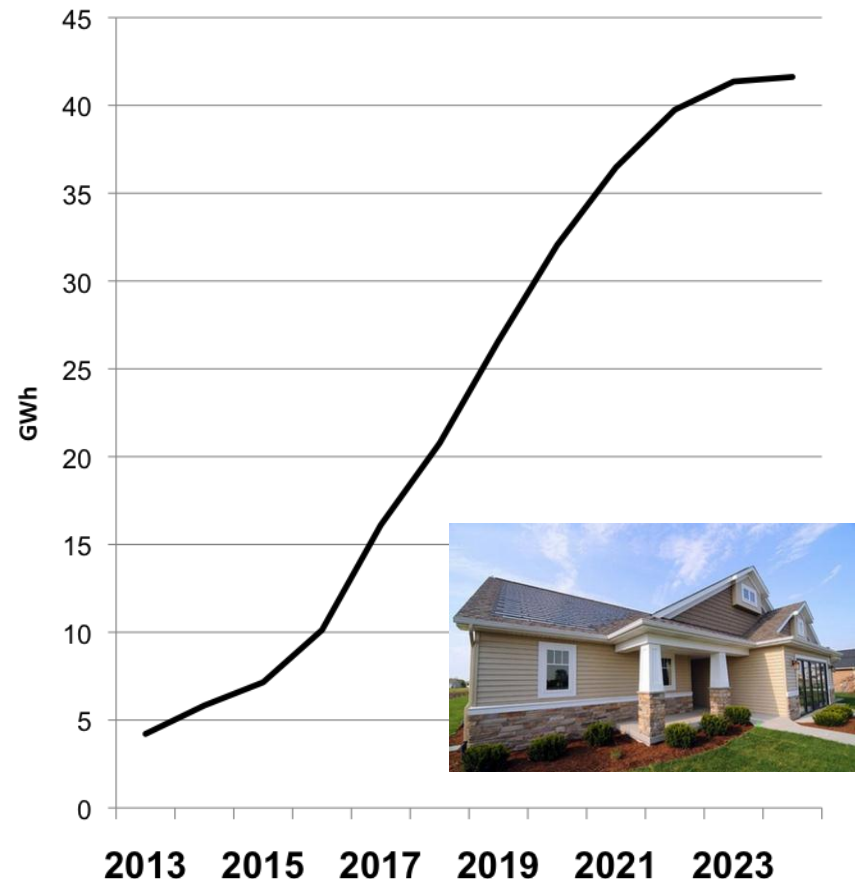
Source: Navigant Consulting, "CPUC Potentials, Goals and Targets Study" (March 2012)

.. But Growing Potential Savings in Buildings

Commercial HVAC



Residential HVAC



2013-2014 Transition Programs: Themes

- Expand deep retrofit strategies for existing building stock
- Leverage ratepayer energy efficiency funds with private financing
- Increase the delivery of efficiency programs by third parties and local governments
- Coordinate and improve product development and adoption processes in the emerging technologies and the Codes and Standards programs

Commercial Retrofit Programs

- Emphasize a “whole building approach” to commercial retrofits
- Commercial Energy Advisor Program (Audits) including DG, DR opportunities
- Sub-metering and plug load control technology
- Collect and use performance data
- Include programs for municipal, university, schools and hospitals



Residential Retrofit Programs

- Promote statewide brand: “Energy Upgrade California”
- Reduce the number and complexity of program while increasing savings targets
 - Middle Income Direct Install
 - Multi-Family Energy Efficiency Rebates
 - Residential HVAC Programs
 - Behavioral Programs
 - Basic CFL and Advanced Lighting “upstream” cost buy-downs
 - Added focus on hotter climate zones



Reduce energy use. Save money. Create jobs.



Leverage ratepayer energy efficiency funds with private financing

Commitment of ~\$200 million over 2 years

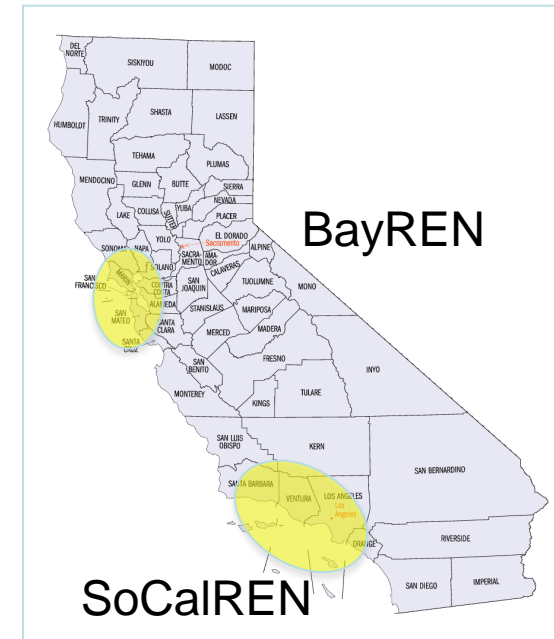
- Expansion of existing On-Bill Financing (OBF) programs
- Continuation of ARRA Programs
- Fast-track financing pilots for launch in 2013 and scale up in 2014
 - Single-family
 - Multi-family
 - Small business
 - On-Bill Repayment (OBR) mechanism for non-utility originated loan

Financing as Tool; Not “Silver Bullet”

- **We still need to drive demand**
- Determine right balances from public/ ratepayer funding:
 - Rebates and incentives
 - Risk or price support for finance mechanisms
 - Technical assistance (audits, diagnostics, quality assurance)
 - Promotion, administration, “cost of sales”
- Incorporate other values contributed by:
 - Benchmarking, labeling, capturing value in appraisals
 - Investments timed to “trigger” points
 - Efficiencies and terms of first-lien or lease finance products

Regional Energy Networks

- Local Government Administered programs
 - Activities which utilities cannot do, scalability for broader geographic reach, hard to reach markets.
- Act as a laboratory for new ideas and carry on ARRA programs
- Program offerings
 - Energy Upgrade CA
 - Financing
 - Regional Energy Centers
 - Codes & Standards
- Total budget: \$75 million



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